

REMARKS

Claims 1, 8, 9, 18, 19, 40, 41, 43 and 50-60 were previously pending in this application. By this amendment, Applicant is canceling claims 9 and 60 without prejudice or disclaimer. Claims 1, 18, 40, 41, 43, 50-56, and 59 have been amended. Support for the amendments to claim 1 and claim 60 can be found at least at page 12, lines 15-18 of the specification as filed. Claim 18 has been amended to remove the reference to claim 9, which has been cancelled. Claim 40 has been amended to clarify the scope of the claim. Claim 50 has been amended to remove references to tumor associated and fragments. Claims 51-56 have been amended to depend from claim 8. Support for this amendment can be found at least in the claims as filed. As a result claims 1, 8, 18, 19, 40, 41, 43, and 50-59 are pending for examination with claims 1, 8, 40, 41, and 43 being independent claims. No new matter has been added.

Rejections Under 35 U.S.C. §112, First Paragraph

The Examiner rejected claims 1, 9, 18, 19, 40, 50-56, 59 and 60 under 35 U.S.C. §112, first paragraph for failing to comply with the written description requirement.

Claim 1

Applicants have amended claim 1 to recite nucleic acid molecules that encode polypeptides having greater than 95% identity with the recited SEQ ID NOs: 39 or 44. Applicants submit that the teaching provided in the specification as filed is more than adequate to allow one of ordinary skill in the art to readily identify whether a particular sequence is or is not, part of the claimed genus. Thus, Applicants assert that the subject matter of the claim is described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the rejection of claim 1 and claims 18, 19, and 50 which depend from claim 1, under 35 U.S.C. §112, first paragraph.

Claims 9 and 60

Applicants have cancelled claims 9 and 60.

Claim 40

Applicants have amended claim 40 to remove the hybridization limitation and to clarify that the scope of the claim as including nucleic acids that bind *in vitro* to a nucleic acid molecule having a nucleotide sequence selected from the group consisting of SEQ ID NO:38 and SEQ ID NO:43 and that reduce the expression of the tumor associated nucleic acid *in vitro*.

Applicants respectfully request withdrawal of the rejection of claim 40 under 35 U.S.C. §112, first paragraph.

Claims 41, 43, 57, and 58

The Examiner asserts at page 4 of the Office Action that that specification does not provide an adequate description of the genus of molecules that are portions of larger molecules as set forth in the claims. Applicants respectfully disagree with this conclusion. The specification includes the nucleic acid sequences set forth as SEQ ID NO:38 and SEQ ID NO:43, thus providing one of ordinary skill in the art with the full sequence of the starting nucleic acid (e.g. larger molecule) from which the claimed sequences are derived. The disclosure of SEQ ID NO:38, coupled with the teaching provided in the specification, is sufficient to permit one of ordinary skill in the art to readily envision a first nucleic acid molecule consisting of a 12 to 32 nucleotide contiguous segment of SEQ ID NO:38, and a second nucleic acid molecule consisting of a 12 to 32 nucleotide contiguous segment of the complement of SEQ ID NO:38, wherein the contiguous segments are non-overlapping. In addition, specific examples of 12-32 nucleotide segments that are members of the claimed genus are provided in the specification as SEQ ID NOs:2 and 3 (see Example 2). Thus, Applicants submit that the invention is described in the specification as filed in such a manner as to allow one of ordinary skill in the art to recognize that Applicants were in possession of the claimed invention at the time of filing.

Similarly, the disclosure of SEQ ID NO:43, coupled with the teaching provided in the specification, is sufficient to permit one of ordinary skill in the art to readily envision a first nucleic acid molecule consisting of a 12 to 32 nucleotide contiguous segment of SEQ ID NO:43, and a second nucleic acid molecule consisting of a 12 to 32 nucleotide contiguous segment of the

complement of SEQ ID NO:43, wherein the contiguous segments are non-overlapping. The specification also provides specific examples of 12-32 nucleotide segments that are a member of the claimed genus (see Example 4, SEQ ID NOs: 41 and 42). Each element in claim 43 is clear and described in the specification as filed in a manner sufficient to convey to one of ordinary skill in the art that Applicants were in possession of the invention at the time of filing.

With respect to claims 57 and 58, Applicants assert that that sufficient written description is provided in the specification to comply with the written description requirement. Claims 57 and 58 are drawn to the use of the nucleic acids of claims 40 and 43, respectively, to amplify at least a portion of SEQ ID NO:38 and 43, respectively. The specification as filed clearly describes 12-32 nucleotide segments of SEQ ID NO:38 and 43 and the use of those sequences to amplify a portion of SEQ ID NO:38 and 43. Thus, Applicants submit that the elements of the invention set out in claims 57 and 58 have been adequately described to convey to one of ordinary skill in the art that Applicants were in possession of the invention at the time of filing.

Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the rejection of claims 41, 43, 57 and 58 under 35 U.S.C. §112, first paragraph.

Rejections Under 35 U.S.C. §112, First Paragraph

The Examiner rejected claims 1, 9, 18, 19, 40, 41, 43, and 50-60 as not enabled. Applicants respectfully traverse the rejection. Claims 9 and 60 have been cancelled.

In the rejection of claims 1, 9, 18, 19, 40, 41, 43, and 50-60, the Examiner appears to suggest that the grounds for the enablement rejection rest on whether the molecules and molecule fragments of the invention are immunogenic and effective in the treatment of cancer (Office Action at page 6). The Examiner asserts that the “portions, complements and fragments are to be contained in compositions that reduce the expression of tumor associated nucleic acid *in vitro* as well as *in vivo*.” (Office Action at pages 5-6). Additionally, the Examiner states that the application as filed is not enabling for the generation of immune responses. (Office Action at page 6).

Applicants respectfully assert that the claims under examination were not and are not (as amended) drawn to treatments or therapeutic methods and that there is no legal requirement for Applicants to demonstrate enablement beyond the scope of the claims under examination.

Although not conceding that the application is not enabling with regard to treatment methods, Applicants assert that the Examiner's rejection based on a perceived lack of enablement with respect to therapeutic methods does not provide an adequate basis for the Examiner's rejection of claims 1, 9, 18, 19, 40, 41, 43, 50-60.

The claims as pending are fully enabled. Given the guidance and working examples provided by Applicants (including partial and full-length sequences), one of ordinary skill in the art would need only routine experimentation (if even that) to practice the full scope of the invention as now claimed.

Based on the arguments presented and the amendments to the claims, Applicants request the Examiner withdraw the rejection of claims 1, 9, 18, 19, 40, 41, 43, 50-60 as not enabled.

Rejections Under 35 U.S.C. §102(b)

The Examiner rejected claims 1, 9, and 60 under 35 U.S.C. §102(b) as being anticipated by the 1997/1998 Stratagene catalog (page 118, 1997/1998). Applicants have cancelled claims 9 and 60 and have amended claim 1. Applicants believe the rejection is moot due to the claim amendments. The reference does not teach nucleic acids that encode polypeptides having greater than 95% identity with a sequence set forth as SEQ ID NO:39 or 43. In addition, the reference is not enabling because the hexanucleotides do not encode polypeptides. Thus, the reference does not provide all the elements of the claims and therefore can't anticipate the claims.

Accordingly, Applicants request the Examiner withdraw the rejection of claim 1, 9, and 60 under 35 U.S.C. §102(b) as being anticipated by the 1997/1998 Stratagene catalog (page 118, 1997/1998).

Rejections Under 35 U.S.C. §102(e)

The Examiner rejected claims 1, 9, 18, 19, 50, and 59 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 5,880,102 ('102). Applicants have cancelled claim 9 and have amended claim 1. Applicants believe the claim amendment renders moot the basis for the rejection of claim 1 and claims 18, 19, 50, and 59, which depend from claim 1. The reference does not teach nucleic acids that encode polypeptides having greater than 95% identity with a

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sequence set forth as SEQ ID NO:39 or 43. Thus, the reference does not provide all the elements of the claims and therefore can't anticipate the claims.

Accordingly Applicants request the Examiner withdraw the rejection of claims 1, 9, 18, 19, 50, and 59 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 5,880,102.

Allowable Subject Matter

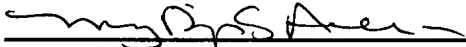
Claim 8 has been allowed.

CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. In view of the already lengthy prosecution of this application, the Examiner is requested to call the Applicants' representative at the telephone number listed below if the Examiner believes that the application is not in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,

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Docket No. L0461.70047US00
Date: September 2, 2004
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